



YOUR MONEY MATTERS



September 27, 1995

Introduction of the 1996 Series Currency

There will be no recall or devaluation of U.S. currency already in circulation. The United States always honors its currency at full face value, no matter how old.

The new \$100 notes, the first in the series, will be ready for circulation in early 1996. The new designs of lower denominations will be introduced later, one at a time, at intervals of approximately six to twelve months. As older notes reach the Federal Reserve from depository institutions, they will be replaced by the newer notes.

This multi-year introduction of the new currency is necessary because of the time-intensive processes involved in engraving and producing the new designs. Sufficient inventory will be produced to ensure worldwide availability of the new series.

The Bureau of Engraving and Printing will provide machine manufacturers with new notes so they can prepare vending machines, ATMs and other cash-handling equipment. While machine manufacturers will have to make modifications to accommodate the new bills, they will have a broader field of machine-readable features from which to choose to authenticate currency.

In conjunction with the Federal Reserve, the Treasury Department will conduct a worldwide public education campaign with two primary objectives: communicate to the general public that there will be no recall or devaluation; and provide information about authenticating the new series to the public as well as central banks, depository financial institutions, other cash handlers and law enforcement agencies.

The New Design

The new currency will be the same size and color as the old notes, with the same historical figures and national symbols. "In God We Trust" and the legal tender wording also will remain on the new bills. This continuity will facilitate public education and universal recognition of the design as genuine U.S. currency—an important consideration since there will be dual circulation of the old and new currencies around the world.

- **A larger, slightly off-center portrait is the most noticeable visual change.** The larger portrait will incorporate more detail, making it easier to recognize and more difficult to counterfeit. Moving the portrait away from the center, the area of highest wear, will reduce wear on the portrait.
- **Shifting the portrait off center will provide room for a watermark, making it harder for counterfeiters to print.** The watermark will depict the same historical figure as the portrait.

- **Serial numbers on the new currency will differ slightly from old currency.** The new serial numbers will consist of two prefix letters, eight numerals, and a one-letter suffix. The first letter of the prefix will designate the series (for example, Series 1996 will be designated by the letter A). The second letter of the prefix will designate the Federal Reserve Bank to which the note was issued. In addition, a universal Federal Reserve seal will be used, rather than individual seals for each Reserve Bank.
- **The use of a unique thread position for each denomination will guard against counterfeiting.**

Among the other counterfeit deterrent features are color shifting ink, microprinting and concentric fine-line printing:

- **Color shifting ink** changes from green to black when viewed from different angles. This feature will be used in the numeral in the lower right-hand corner.
- The numeral in the lower left-hand corner will incorporate **microprinting**, a printing technique using lettering that can be read with a low-powered magnifier. Extremely small print ("USA 100" on the \$100 bill) appears as a thin line to the naked eye and yields a blurred image when copied. On the \$100 bill, similar microprinting will also be used on the lapel of Benjamin Franklin's coat.
- The background of the Franklin portrait on the \$100 note will incorporate the technique of **concentric fine-line printing**, as will the background of the picture of Independence Hall on the reverse side. This type of fine line printing is difficult to properly resolve on scanning equipment and to accurately replicate by other means of printing.

Although all denominations of currency will have security features, the number of features will vary according to denomination. The \$100 note will have a full package of features, while the \$1 note will have fewer and less sophisticated features. The basic appearance of all denominations will not vary.

History of the Redesign

Until the late 1920s, U.S. currency was redesigned frequently. There also were several types of notes in circulation: United States Notes, National Bank Notes, and Silver Certificates. Since the introduction of the Series 1928 Federal Reserve Notes, changes in the design, including the use of microprinting and a security thread in Series 1990, have not affected the overall architecture of U.S. currency.

The counterfeit-deterrent features added in Series 1990 were the first step in responding to advances in reprographic technologies. Although these features have proven effective and will be retained, additional measures are necessary to protect against future threats posed by continued improvements in copy machines and scanners. The new design, beginning with Series 1996, is the culmination of a five-year study aimed at staying ahead of the counterfeiting threat and is part of a continuing process to protect U.S. currency.

Authority to change currency design and security features rests with the Secretary of the Treasury, but Congress has been informed throughout the redesign process. The New Currency Design Task Force, comprised of representatives from the U.S. Treasury Department, Federal Reserve System, U.S. Secret Service and the Bureau of Engraving and Printing (BEP) made its recommendations to the Advanced Currency Deterrence Steering Committee which then made recommendations for the new design and security features to the Secretary of the Treasury. A National Academy of Science (NAS) Committee on Counterfeit Deterrence Features conducted complementary but separate studies.

More than 120 security features were examined and tested, including those submitted in response to a BEP solicitation, those used in other world currencies, and those suggested by the NAS. Evaluation criteria included impact on security, proven reliability, ability to be manufactured in large quantities, and durability over time. Among the features evaluated were holograms, color shifting films, thread variations, color patterns, and machine-readable enhancements.

The strategy of the Design Task Force is to incorporate as many features as are justifiable. The new features have proven successful in other countries as well as in test environments at BEP and the Federal Reserve. The Design Task Force will continue to see and test new security features as technology further evolves.

Cost

The total cost of developing the new design was approximately \$765,000. Included in this cost was funding for the National Academy of Science Study — \$265,376. Another \$500,000 was spent to purchase test quantities of features and carry out internal evaluations.

Current notes cost 3.7 cents each, and BEP produces about nine billion notes each year. Security enhancements will increase the cost by a fraction of a cent. The Federal Reserve System is funding the development and introduction of the new currency through earnings the Federal Reserve receives from interest on its holdings of U.S. government securities and on fees charged to depository institutions for providing services such as the processing and clearing of checks.